CHO-SEAL® 6750

Cost Effective, Low Durometer, EMI Shielding, Chemically Resistant Fluorosilicone Elastomer

Parker Chomerics CHO-SEAL 6750 is a low durometer, nickel-graphite filled fluorosilicone EMI shielding material. CHO-SEAL 6750's high temperature capability and chemical resistance makes it a good choice for environmental sealing and shielding. As an electrically conductive fluorosilicone elastomer, this new material provides good EMI shielding across a broad frequency spectrum as well as providing environmental sealing from dust, moisture, and even challenging Ingress Protection (IP) ratings. The fluorosilicone binder provides additional fluid resistance to harsh fluids and chemicals such as machining oils, hydraulic fluids and various fuels. CHO-SEAL 6750 is the lowest durometer fluorosilicone-based material in the Chomerics conductive elastomer product family.

This product is only available in molded, sheet stock, and die-cut formats. Molded formats include O-rings, D-rings, and custom shapes. Sheet stock can be supplied with an electrically conductive pressuresensitive acrylic adhesive (PSA) for assistance during the assembly process.

Contact Information

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Product Features

- Resistance to harsh chemicals
- Low compression force
- Cost effective EMI shielding solution
- Higher temperature compatibility
- Available only in molded profiles, sheets, or die-cut/water jet cut (no grit)
- Can be supplied with an electrically conductive pressure sensitive acrylic adhesive (PSA)

Typical Applications

- Military electronics housings
- Aerospace modules
- Connector interface seals
- Telecommunications equipment
- Industrial applications

CHO-SEAL 6750 Product Information

Typical Properties [†]		CHO-SEAL 6750	Test Method		
Physical	Molded (M) or Extruded (E)	М			
	Conductive Filler	Nickel-Graphite			
	Elastomer Binder	Fluorosilicone			
	Type (Ref. MIL-DTL-83528)	Not Applicable			
	Volume Resistivity, ohm-cm, max., as supplied without electrically conductive pressure sensitive adhesive	0.050	CEPS-0002 ^(C) (Q/C)		
	Hardness, Shore A	53 ±5	ASTM D2240 (Q/C)		
	Specific Gravity	2.03 ± 0.25	ASTM D792 (Q/C)		
	Tensile Strength, psi (MPa), min.	90 (0.62)	ASTM D412 (Q/C)		
	Elongation, % min.	90	ASTM D412 (Q/C)		
	Tear Strength, lb/in. (kN/m), min.	25 (4.37)	ASTM D624 (Q)		
	Compression Set, 70 hrs at 100°C, % max. ^(A)	25	ASTM D395, Method B (Q)		
Thermal	Low Temperature Flex TR10, °C, min.	-65	ASTM D1329 (Q)		
	Maximum Continuous Use Temperature, °C	200			
Electrical	Shielding Effectiveness, dB, min. ^(F)				
	200 kHz (H Field)	55	CHO-TP08 (C) (Q)		
	100 MHz (E Field)	129	CHO-TP08 (C) (Q)		
	500 MHz (E Field)	100	CHO-TP08 (C) (Q)		
	2 GHz (Plane Wave)	115	CHO-TP08 (c) (Q)		
	10 GHz (Plane Wave)	117	CHO-TP08 (C) (Q)		
	40 GHz (Plane Wave)	Not Tested	CHO-TP08 (C) (Q)		
	RoHS Compliant	Yes	Chomerics Certification		
	UL 94 Flammability Rating	Not Tested	UL 94		

Note A: Compression set is expressed as a percentage of deflection per ASTM D395 Method B, at 25% deflection. To determine percent recovery, subtract 0.25 of the stated compression set value from 100%. For example, in the case of 30% compression set, recovery is 92.5%.

Note C: Copies of CEPS-0002, CHO-TP08 and CHO-TP09 are available from Parker Chomerics. Contact Applications Engineering.

Note F: It may not be inferred that the same level of shielding effectiveness provided by a gasket material tested in the fixture per MIL-DTL-83528 Para. 4.5.12 would be provided in an actual equipment flange, since many mechanical factors of the flange design (tolerances, stiffness, fastener location and size, etc.) could lower or enhance shielding effectiveness. This procedure provides data applicable only to the test fixture design of MIL-DTL-83528, but which is useful for making comparisons between different gasket materials. The 40 GHz test data for all materials uses TP08 test method.



CHO-SEAL 6750 Ordering Information

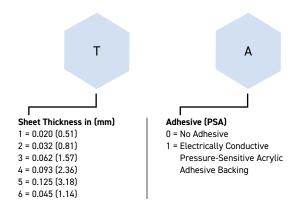
STANDARD SHEET STOCK SIZE										
AVAILABILITY BY THICKNESS, inches (mm)										
Part Number	Sheet Size Inches (cm)	0.020 ±0.004 (0.51 ±0.10)	0.032 ±0.005 (0.81 ±0.13)	0.045 ±0.006 (1.14 ±0.15)	0.062 ±0.007 (1.57 ±0.18)	0.093 ±0.010 (2.36 ±0.25)	0.125 ±0.010 (3.18 ±0.25)			
40-TA-1010-6750	10 x 10 (25.4 x 25.4)	\checkmark	√	√	√	\checkmark	√			
40-TA-1015-6750	10 x 15 (25.4 x 38.1)	\checkmark	√	√	\checkmark	\checkmark	\checkmark			
40-TA-1020-6750	10 x 20 (25.4 x 50.8)	\checkmark	√	√	\checkmark	\checkmark	√			
40-TA-2020-6750	20 x 20 (50.8 x 50.8)	NA	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark			

√ = Available

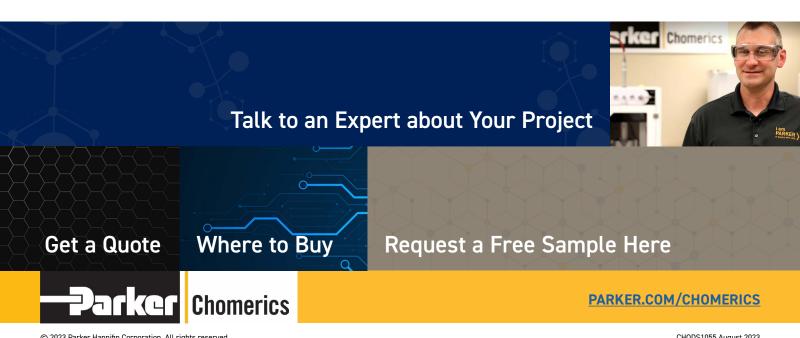
NA = Not Available

For sizes other than those shown, change 5th through 8th digits.

Thickness and Adhesive Option Codes



Die-cut part tolerance table is available in the Conductive Elastomer Engineering Handbook on page 75. Page 75 of the handbook references Table 6-2 and has overall tolerances on flat die-cut gaskets, hole diameter, and thickness. Access it at parker.com/chomerics.



^{*}TA refers to thickness and adhesive options.